

ABSTRACT

The object of the present invention is to provide a low pressure processing system having no possibility of leakage at a valve provided in an exhaust passage when the valve is closed, and capable of reducing a load of maintenance work. An exhaust pipe 3 connected to a reaction tube 1 is provided therein with a gate valve 4 for hermetically closing the exhaust passage. A purge gas is jetted, from jetting ports circumferentially arranged respectively in a valve seat and a valving element of the gate valve, into a gap between the valve seat and the valving element. This prevents foreign objects originated from a process gas from adhering to those surfaces of the valve seat and the valving element that face the gap between the valve seat and valving element, improving sealing capability of the gate valve.

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